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Commanders' Perception of Risk: Enabling Boldness

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AUTHOR:

Major Justin W. Dyal, USMC
USMC Command and Staff College

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Mentor and Oral Defense Committee Member: Dr. Donald F. Bittner, Professor of History.
Approved: Donald F. Bittner
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Oral Defense Committee Member: J. W. Gordon
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Executive Summary

Name: Major Justin W. Dyal, USMC

Title: Commanders' Perception of Risk: Enabling Boldness

Thesis: Prevalent safety and force protection perceptions, policies, and emphasis have a negative effect on the commander's ability to make decisions concerning risk involved in mission accomplishment.

Discussion: Men have an innate psychological resistance to killing other men. LTC David Grossman, USA (ret), provided groundbreaking analysis of this resistance and how to overcome it through conditioning for military purposes. This paper seeks to extrapolate his model of enabling killing to the decision making process a commander uses to evaluate acceptable risk when placing his unit in harm's way. It shows how the elements of enabling; *demands of authority, group absolution, predisposition via culture and conditioning, and emotional distance from the victim,* have all decreased from previous conflicts for a variety of reasons. This results in commanders who must make life or death decisions without the support that allows boldness of action. Commanders who naturally possess this boldness and act anyhow may further pay a price in later mental health from guilt and stress from their isolated decisions. The paper goes on to show how prevalent safety and force protection practices serve as negative inputs, effectively conditioning commanders to avoid risk, while institutional counterweights that support bold decisions are present but diminishing.

Conclusion: Disconnects in policy-level risk attitudes with doctrine, equipment, and roles/missions should be resolved. Commanders must effectively communicate their expectations in terms of acceptable safety and risk to their subordinate leaders and reinforce the message wherever possible. They must further seek to accommodate valid safety and force protection concerns in ways that do not negatively influence their subordinate leaders.

Preface

The topic of a commander's perceptions of risk is certainly timely, but not at all new. The American War Between the States arguably lasted much longer than it need have in large measure due to General McClellan's inability to hazard his magnificent Army of the Potomac. I have been mentally reflecting upon this topic for the past few years. Throughout the course of several deployments in various operations and regions, I cannot recall ever receiving an order that clearly identified how much risk was acceptable for me to countenance as a commander; rather only what my mission was. This is perhaps as it should be, but more frequently directives and guidance outside of and separate from operations orders do much to attempt to mitigate risk for the commander, regardless of what the mission priority might be. I find this disconcerting, and through countless discussions with peers have found a groundswell of similar concern. I set out to ascertain if the safety-conscious atmosphere prevalent in the force was having a detrimental effect on commanders. As research progressed, I was surprised to find that aspects from societal and technological progression to well-intentioned safety programs are quite possibly affecting the commander's ability to accept risk at the psychological level. If this is so, it is much more than an occasional safety-happy "weak" commander, but a situation that our Corps must address. I hope to simply highlight a potential problem.

The case studies included are in no way an indictment on anyone in the chains of command involved; rather they are topical examples that support the thesis. It is understood that throughout history even the great captains made mistakes in perfecting their craft. Further, the contemporary screening and selection processes involved in selecting commanders consistently provide great leaders to the operating forces. Despite some very few proving themselves

unworthy of command, these examples are not to highlight questionable decisions but to show the institutional framework in place that promoted each decision. I hope that the reader can examine each with an open mind in that light.

This effort is a result of the help of many Marines. First those with whom I have served whose example encouraged the effort. I owe specific thanks to those Marines of all ranks that graciously provided input, both for the record and non-attributionally. The subject is one that many have thought of, but not everyone wants to be quoted on. The breadth of those interviewed and who engaged in discussions on the topic encompasses exemplary Marines with magnificent collective combat experience.

I would also like to thank Dr. Donald F. Bittner for his mentorship and guidance throughout this process. His command of both history and contemporary issues, as well as his faith in the institution we proudly serve, are inspirational. His example as well as the other talented professors and faculty at Command and Staff College will encourage professional growth and excellence long after this paper is archived.

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The Reduced Cost of Conflict

Contemporary America enjoys unprecedented prosperity, safety, and security. And while the United States Marine Corps is at war most of the country remains directly unaffected. Despite this lack of involvement, increasing numbers of citizens passionately protest the war's cost in American lives. There appears to be a growing sensitivity to sacrificing members of the all-volunteer force in matters short of true national survival. The Iraq War has lasted longer than the Second World War, yet the Marine casualties to date are fewer than those suffered on one day at the small Pacific atoll called Tarawa in 1943.[1] Against this backdrop Marine commanders continue to operate against asymmetric enemies that seek to exploit this American reluctance of taking casualties. The future may be dotted with conflicts that increasingly do not allow the U.S. to use the leverage that its technological and conventional advantage provides. Prominent thinkers on military affairs offer slightly different views of conflicts in the coming decades, but many of them agree that the nature of the conflicts will be savage, with asymmetries directed to test American resolve by causing as many casualties as possible while frustrating the military establishment and homefront by avoiding American areas of strength.[2]

Victory in these future conflicts may be increasingly costly. This stands in contrast to the practical and political requirements to minimize losses and preserve the force. Preserving a military force has always been a daunting challenge for the commander. Disease and non-battle injuries historically produced far greater losses than most battles.[3] The tremendous medical advances of the 20th century largely removed disease as a concern. Advances on other fronts mitigated the damage of weather and the environment to forces. Technology allowed the replacement of large drafted forces with highly trained volunteers performing technical tasks. Advances in training and industrial safety reduced the traditionally dangerous industrial aspect or

service on ships and ashore. The peace dividend at the end of the Cold War reduced the available numbers of the force and made each individual service member that much more important, from both a humanitarian and professional sense. Concurrently with this, social and economic change in the United States changed the nature of life in the service[4]. Where a young Marine may have once largely remained on a remote base except for a brief trip into town on pay day by taxi, large numbers of Marines now purchase and extensively use private motor vehicles. With large numbers of adolescent males on the roads, mishaps and fatalities soared. So, just as the military had reduced traditional sources of non-combat losses, the men themselves became the most dangerous source of loss at the same time as the manning levels of units had been stripped of redundancy. In this environment every loss was felt, and seemed wholly preventable, senseless, and tragic. This led to the sustained annual increase of safety related training and emphasis directed at the Marines themselves, rather than on the safe conduct of mission tasks. [5]

The onset of the Global War on Terror brought returning veterans who increasingly became involved in accidents for a variety of reasons, while overseas the Iraqi campaign shifted to an insurgency that produced a growing number of frustrating losses from roadside bombs. Stateside generals greatly increased the pressure on commanders to reduce mishaps occurring to their men, resulting in a wide variety of actions in an attempt to "do something". Overseas, the commanding generals and their subordinate commanders incorporated more and more means to protect Marines from the danger of Improvised Explosive Devices (IEDs) as the polls showed ever decreasing support for the war.

Between these two situations, there became a tremendous emphasis on safety Corps-wide. As the overall U.S. casualty rates neared certain milestones (i.e. each round thousand) the media homed in on each passing loss, gaining attention in the public and the military.[6] In

garrison, headquarters' stress of filling manning documents for successive deployments to combat was heightened by each preventable non-combat fatality or injury.

The end result of this progression has been an all time record emphasis on safety and force protection, both in combat and at bases and stations. This is understandable in abstract. There is a cost and unintended consequence to this, however. The prevailing emphasis on safety, force protection, and mishap prevention has had a negative impact on how commanders perceive mission accomplishment and acceptable risk. This happens at the psychological level as the next section will illustrate.

Warrior's Mindset: Conditioning and Response

Numerous researchers have expanded upon the research conducted during World War II[7] that suggested that significant percentages of soldiers in front-line units did not actively participate in combat by actually attempting to fire upon and kill the enemy. In On Killing, Author Lieutenant Colonel David Grossman, USA (Ret), extrapolates this phenomena to an innate human resistance to kill another of one's own species.[8] He proposes that there are a small number of individuals who are naturally able to overcome this tendency in the performance of their duties, but that the remainder must be conditioned through training to do so.[9] Grossman's work was groundbreaking when published in 1996, and has since been widely accepted within the military training community and referenced by other psychologists.[10] Grossman relates that the difference for a leader is that he is not only killing the enemy via his unit, he is also responsible by his orders for the death of his own men, effectively killing them also.[11]

Grossman draws a model for an anatomy of killing. He lists the demands of authority, group absolution, predisposition of the killer, and emotional distance from the victim as factors involved in overcoming the psychological resistance to killing[12]. Appendix A is a graphic depiction of this model. Each of these can be drawn out in association with the subject at hand, that *institutional emphasis on safety, force protection, and mishap prevention have a negative impact on commanders' perception of mission accomplishment and acceptable risk.*

The *demands of authority* are traditionally one of the stronger factors in getting men to do dangerous things and kill other men. In the context of a commander, this can be seen not as the leader ordering his men to fire (kill the enemy), but as the higher commander ordering aggressive actions or demanding mission accomplishment that would place the affected commander's unit at risk (potentially kill his own men). Numerous interviews indicated that in the current environment the demands of authority for a commander to place his men in harm's way have become unclear or are not present[13]. Grossman further breaks the demands of authority into other components, two of which that apply to commanders being the proximity of the authority figure to the subject and the intensity of the authority figure's demands for killing behavior.[14] The current operating environments often have commanders removed from their higher headquarters by considerable distance and the contact with it by email, visit, or radio will emphasize certain priorities. Many contemporary commanders have experienced that priority as not killing behavior (accepting risk in the accomplishment of missions) but on compliance with safety regulations and thorough risk management.[15] In a counter-insurgency it is often unclear who needs to be killed, and emphasis from higher levels of command easily shift from killing the enemy to *not killing others by mistake.* There may be a link to the support for killing from immediate levels of leadership and the leader's commitment to in turn risk the lives of his men in

the accomplishment of missions. Likewise, as kinetic operations diminish there is an increased emphasis on reducing casualties and mishaps of any kind, regardless of the situation where many COIN operations pose significant inherent hazards.

Group absolution is the intersection of accountability to one's group and the anonymity of killing from within the group, vice as an individual.[16] Grossman postulates that this is one reason explaining the ascendance of the phalanx in battle for so long and the exponential increase in effectiveness of a crew-served weapons team over individual riflemen. The individuals kill as a group and cannot succumb to resistance due to group pressures and likewise cannot be singled out as responsible for any certain killing. Group absolution is often simply unavailable to the commander, who alone must make the decision to order actions that may harm or kill members of his own unit. In past battles where every company or battalion along the line incurred significant casualties in a campaign there may have been an element of group absolution for peer groups of commanders.

Currently, aside from occasional instances of intense kinetic operations such as the march to Baghdad or battle of Fallujah, it is unusual for multiple units to receive casualties at a given time. The character of contemporary warfare in general and the current fights in particular, have brought commanders to the possible conclusion that they "probably" should not be having casualties in security operations. Numerous officers feel that the perception remains in some minds (however unjustly) that casualties are usually the result of a leadership failure[17] and not a by-product of the very nature of war. This lack of group absolution further isolates a leader who must make command decisions that balance the safety of his men and the accomplishment of a given mission.

Grossman refers to *predisposition of the killer* as a combination of what training and/or conditioning the soldier has received, his recent experiences, and his natural temperament.[18] In regards to commanders, these elements are slightly harder to extrapolate than on an individual. Soldiers are trained over time to employ their weapon systems under a variety of conditions in realistic simulations and scenarios, thus making them more likely to fire upon (and kill) an enemy. Commanders are likewise trained to employ their unit, however, such training rarely includes other than token casualties, and almost never includes evaluated decisions that may or may not lead to losses with resultant supportive feedback. Recent experiences in the context Grossman mentions as enablers are events like the loss or wounding of a comrade enabling the ability for a soldier to kill. In the context of a contemporary commander, it is perhaps more likely that close calls with Improvised Explosive Devices, negative command reactions to routine mishaps, or negative reaction over Escalation of Force violations make him less likely to risk loss to his unit by aggressive execution. Concerning temperament, even in the epic wars of our past, commanders who were well known to countenance high losses to accomplish the mission were rare, hence Lincoln's famous statement vis-à-vis Grant, " I can't spare this man. He fights."[19]. Each example that history hands down with such a reputation is remarkable not only for being the exception case, but also for the negative stigma that implies.

Emotional distance from the victim is a key element in warfare, thus the frequent dehumanization of a given enemy with slang and slurs, and the development of weapons with ever-greater ranges. For the officer who must knowingly order his men to their potential injury or death, the unit can replace the "victim" in Grossman's model and he cites the traditional class separation between officers and enlisted as an important element in achieving this distance.[20] Society at large, and the very nature of the highly technical all-volunteer force, has eroded some

of that traditional distance. Further, commanders now interact with and attempt to leverage their Marines' families through programs such as the Key Volunteer Network.[21] Where a commander in World War II may have had to write a letter to a casualty's family and soldier on for the remainder of the campaign or duration of the war, a contemporary commander may have to face the spouses and key volunteers in a video teleconference within a week or two of a loss. He further knows that he will have to interact with these spouses again in person in no more than seven months' time. There is precious little emotional distance and separation available to a present-day commander.

The elements in Grossman's model have distinct psychological connotations that may affect a commander's perception of acceptable risk. Moving from this background it is next useful to analyze the variety of inputs that the commander receives in the execution of his duties.

Inputs to Caution

" We aren't any safer in training. We just don't train as hard."

USMC GySgt[22]

The Marine Corps presently has the most combat experience of any time since Vietnam. Yet, even with that experience, the nature of military service ensures that most commanders will have spent relatively little time in combat settings making command decisions compared to time spent in civilian and garrison environments. When a commander makes such a decision he tempers it, willingly or not, with the inputs he has received throughout his lifetime, particularly those in his military career. Most of these inputs are counterintuitive to placing men he is

responsible for at risk. This is essentially baggage that the commander may find hard to jettison when the time demands it.

The largest inputs come from the society the commander is a part of. While the military as a whole, and the Marine Corps in particular, enjoys unprecedented popularity and respect from the people of the United States, the support for the combat operations in Iraq and Afghanistan has been on a steady decline[23]. Popular media has decried the loss of life and casualties with little balance toward what those losses have achieved.[24] The argument over whether the war in Iraq was/is just continues to be an open sore for many Americans. Emphasis on just war theory and law of armed conflict in every level of officer training attunes commanders to these concerns at some level of their psyche.[25]

Leaders are also products of contemporary society. A company commander assuming command in 2008 was likely born around 1981. In his lifetime he has experienced government authority become increasingly protective with the requirements for seat belts, air bags, child seats, smoking prohibitions, etc. He witnessed the explosion of liability litigation, wherein every American could reasonably feel that there was no longer such a thing as fate or bad luck, rather individuals can find someone to sue and hold accountable for any misfortune. He observed several extraordinarily successful U.S. conflicts that resulted in remarkably few casualties in Panama and Kuwait, watched U.S. policy thwarted by less than two dozen deaths from one incident in Somalia and saw military force hesitatingly applied throughout the 90's over concern of casualties. His entire life experience has implied that authority is responsible to protect from harm, and that military victory must be swift, overwhelming, and at low human cost.

The experience of garrison life has numerous negative inputs. Every passing year, officers feel that there is yet more emphasis placed upon mishap prevention.[26] In many units nearly every time Marines see their commanding officer, he will be exhorting them to act safely, pleading with them to have no mishaps during liberty. Officers are asked to collect pledges from their men that they will wear their seat belts under any and all circumstances and are expected to rigorously track these and other rosters that prove attendance at frequent and lengthy safety "stand-downs".[27] Units are required to wear reflective safety belts and have safety vehicles and corpsmen on hand in order to conduct even small unit physical training.[28] Any mishap that causes injury resulting in loss of work is immediately investigated and aggressively reported up through multiple layers of command.[29] Recently, battalion or squadron commanders who lose a Marine in any type of off-duty fatality can expect to have to see the MEF Commanding General, a leader three levels up from them, to explain what happened.[30] Each of these inputs has a clear and valuable reason to exist, and even with more energy devoted to mishap prevention each year, fatalities remain basically on average or increase.[31] But the sum effect of the sheer number of safety-related inputs can easily "condition a risk-aversion pathway" into commanders without proper counterweights.[32]

As the Marine goes to the field to "train as he fights" still more negative inputs await. "Safety is paramount!" accompanies the instructions to nearly any event. Weather conditions that would not halt any real combat mission are grounds to halt all training.[33] Commanders must make creative concessions to work around weather to prevent any type of weather related casualty, despite the reality of soon deploying to a desert environment where their men will be forced to operate around the clock in prescribed levels of heavy body armor. Operational Risk Management is conducted for nearly any event, with matrices being pencil-whipped to make

inherently dangerous activities seem safe.[34] There is absolutely no leeway to have any type of accident in live-fire training. Marines who will carry their weapons for days or weeks in condition 1 while deployed are required to load them only under the most supervised and controlled of conditions while training. The integration of supporting arms requires minimum safe distances that exceed those of what the Marines know they will use in combat, because they must be able to positively remove any chance of injury[35]. Marines with various primary skill sets will spend weeks of precious pre-deployment training time driving circles around their base, regardless of demonstrable skill or previous driving experience, in order to get enough road time to become licensed Humvee drivers in the hopes that there will be fewer accidents. *The unspoken message of all of the above is that safety and avoidance of injury supersedes aggressive execution of the mission* (preparing for combat) and that the *mission can be extensively modified, reduced to a common safe denominator, or accommodated in such a way as to positively eliminate the likelihood of injury.*

Training for commanders prior to deployment contains little simulation or decision-making, consisting largely of managerial duties ensuring the unit is prepared for departure. What little company or battalion level training occurs often receives token exercise of casualty evacuation procedures to ensure the process is rehearsed and understood. Mass casualty drills, when they occur, are often depicted as being civilians or indigenous forces. Typically, casualties other than the scripted insert to prompt casevac, are used in scenarios to highlight mistakes and are critiqued as such. These things *reinforce the message that commanders should not receive casualties.*

A more subtle input is the current provisional nature of equipment and tactics. Leaders who have matured in the Marine Corps using one set of equipment during the war found

themselves receiving more and more equipment that signal departures from the underlying thought processes underpinning earlier tactics. For years, training in what was then called Military Operations other than War (MOOTW) called for doffing as much body armor and non-essential gear as possible to prevent alienating the populace. Commanders now have a prescribed armor level consisting of items that have increased from basic interceptor fragmentary vest, to various upgrades of small arms protective inserts, through the addition of throat protectors, shoulder protectors, side armor plates, etc. Each of these items has undoubtedly saved lives, but for the Marine who trained for years either in soft cover and 782 gear or a basic helmet and "flak jacket" depending on an estimate of the mission, enemy, terrain, and weather (METT) the subtle signal is that the rules have changed. The pre-2003 USMC was not a motorized force, but when exercises called for motorization there was a brief nod to basic hardening via sandbags and the mentality that elements would dismount at danger areas to prevent damage to the precious low-density asset, the vehicle. The deployed Marine Corps today has become a heavy, armored, motorized force with public outcry over the available armor and tactics shifting to the vehicle being expendable in order to protect the embarked troops. These, and many other items of equipment with similar implications, have largely been fielded urgently and tactics have adapted in theater with little formal discussion of the difference in conceptual tolerance of risk and endangerment. Many of the newly fielded items have also saved countless lives, but they represent such a dramatic shift as to have potentially caused some doubt about how much of a commander's previous experience, tactics, and attitudes toward acceptable risk remain relevant. In such a case that the commander begins to doubt the relevancy of his training, the other inputs he receives from his society and superiors will have an increased weight.

Counterweights

"Marines overcome our natural fear of injury and death and fight for three chief reasons: First, we are well -trained and well-led. Second, ***we have convictions that will sustain us to the last sacrifice...*** *"*

FMFM1-0 emphasis added[36]

The United States Marine Corps is an elite service, with an enviable reputation across all of the nation's wars. If contemporary safety concerns have negative inputs into the commander's decision-making, there must be counterweights that provide balance and allow the commander to accept risk and make the decisions that place his men in harm's way. The Corps' successes in Iraq and Afghanistan illustrate that many commanders have placed their men at risk in order to accomplish higher headquarters' mission and intent. The successes from Task Force 58's operations in Afghanistan through the march up to Baghdad and later the battle for Fallujah and on to current successes in Al Anbar would simply not have been possible without the sacrifice of those Marines who were lost or seriously injured in these efforts[37].

The strongest input serving as counterweight is the *very reputation of the Corps and each Marines' association with that group identity.* The Marines are the most tradition-minded of the service branches and every leader is well aware of the storied history of his organization. The current Commandant, General James Conway, perhaps realized this in his recent directive for every Marine, regardless of rank or position, to read *First to Fight*, a history of the Marine Corps written by one of its legendary leaders.[38] A service which constantly recalls epic battles won at hard cost is less likely to balk at present hardships. However, this association with the past also

engenders frustration with leaders who see overly cautious or risk averse behavior in current operations.[39]

The previous section discussed how tactics as well as policy directives have shifted and adapted to the current environment. Serving as counterweight to potentially negative inputs there is the overarching *doctrine* that shapes Marine thought. In *Warfighting* the Marine Corps outlines a bias for initiative, boldness, and ruthlessness.[40] Leaders at all levels are continually redirected to the thoughts shaping the concept of maneuver warfare and resulting doctrine.

Training is a very powerful counterweight available, *if exercised correctly.* The preceding section discussed problem areas, but aggressive execution in training is the strongest form of conditioning as much for leaders as for the individual rifleman overcoming the resistance to interpersonal violence. The unfortunate reality is that commanders often get precious little time to train in making tactical decisions and when opportunities are available the cost in unit casualties is often unclear, assumed away, or delicately avoided.

The primary military occupational specialty (MOS) seems to apply in some cases. An infantry leader seems to intuitively understand that his job exists for combat and the implication of combat is that some individuals, even doing everything correctly, may be injured or killed. The timeless reality of combat remains: There is an enemy with an independent will and he will fight. The further removed from ground combat the specialty is, where the leader provides the same support in combat that he would in garrison with no direct relationship to an enemy, there may be a decrease in the specialty's function as a counter.[41]

Communication from the commander is the most important counterweight available.[42] This feeds into the demands of authority in Grossman's model. Some leaders have recognized

this in application to getting Marines to apply violence without stress or guilt.[43] The same applies to making a subordinate commander comfortable with accepting risk in the accomplishment of missions. To offset the myriad negative inputs stressing the need for safety a leader certainly benefits from a direct affirmation from higher headquarters that combat is uncertain and that aggressive execution is expected despite the risks involved. One battalion commander with experience in both Afghanistan and Iraq spoke frankly to his company commanders that they should not expect to bring everyone home. He further stated that he would have relieved any commander who made goals or promises that they would do so.[44] However, there seems to be an anecdotal trend of commanders in some units making such admirable, idealistic, and uncontrollable statements.[45] This communication from the commander, vital as it seems, is often absent. There is currently no formal section in the orders process that covers acceptable risk and what cost is acceptable in accomplishing the mission.[46] Some communities incorporate Operational Risk Management (ORM) and/ or go/no go criteria to help communicate a similar point, but these tools do not answer this question directly.

The above illustrates that in exceptional units with strong commanders there are sufficient counterweights to offset the negative inputs and allow a leader to effectively balance risk and mission accomplishment. However, it should be clear that there are insufficient institutional counterweights to guarantee this, given the natural resistance to place others in danger and the numerous roadblocks and negative inputs that apply. The next section will cover examples of decision-making that emphasize safety above the mission.

Safety in the Fog of War: Case Studies

"It was a palpable feeling to me that casualty mitigation had become more important than the mission."

USMC Captain on the shift in risk perception over his three tours in Iraq[47]

One case study that has permeated the current conflicts has been the mandatory use of increasing levels of personal protective equipment, or PPE. Shortly after the fall of Baghdad in 2003 one prominent battalion commander wrote an op/ed piece espousing the success of his men's disuse of armor in stabilization and security operations wherever possible, and contrasted the effects with neighboring Army units.[48] Shortly after that piece ran the various MEF commanders responsible for Al Anbar province centralized the standard for personal protective equipment worn throughout the various areas of operations, each with differing missions, enemies, terrain, and troops available. Commanders at lower levels had the ability to request downgrades for particular missions, which was granted with sufficient justification.[49]

In recent years the amount of armor and protective equipment required has increased with nearly every rotation into Iraq, prompting a recent study on the negative effect the PPE weight has on the individual Marine.[50] A platoon sergeant serving in Iraq wrote of the frustration of foot patrols not being able to close with and destroy insurgent forces due to the mobility differential.[51] Others have remarked on ways that various pieces of the mandated PPE that directly address the improvised explosive device threat actually *cause* another hazard or degrade mission effectiveness.[52] One company commander remarked on occasions where his Marines hesitated at a critical moment to perform a task that would have required their doffing their armor, so ingrained was the command requirement to constantly wear each piece.[53]

The MEF PPE policy has undoubtedly saved many Soldiers, Sailors, and Marines from injury and fought the human weakness of seeking comfort and convenience. However, the policy discourages active evaluation of METT and how best to accomplish the mission and chips away at the trust for decentralized execution so emphasized in *Warfighting.* These policies send the message that protecting the individual is the given priority and accomplishing the mission must be worked around the challenges of that maximum protection level. Many commanders were unaware that downgrade waivers were even available, or felt that seeking one was actively discouraged.[54]

Another case revolves around the fielding and implementation of armored vehicles in Iraq. Through mid-2005 the MEF had a motley collection of vehicles in various states of hardening, many remaining from the largely unarmored force that had marched up from Kuwait in 2003. In the spring of 2005 Multi National Forces West issued guidance that only vehicles armored to a certain level would be used at all, despite insufficient numbers to support ongoing operations. Commanders were forced to implement creative workarounds to accomplish existing missions with the available armored stock and compete for the incoming uparmored humvees as they arrived, as well as shift their resources to support a diminished number of possible missions until sufficient armored vehicles were distributed[55]. Next, the emphasis shifted to vehicles with even more protective capacity, such as the Cougar and the later Mine-Resistant Ambush Protected vehicles (MRAP)[56]. Leaders saw a shift in usage and tactics, with some commanders shying away from foot patrols and others discouraging their men from even dismounting the vehicles to react to contacts.[57] The widespread availability of armored vehicles has now provided a means for some commanders to slip into a "cocoon mentality"[58] and cede the initiative, rather than accept the risk that accompanies operations outside of the vehicles.

The mega bases throughout Iraq, from Al Taqqadum to Al Asad and LSA Anaconda serve as another interesting study. The "forting up" on the various bases occurred unabated for the first several years of the war, with more and more barriers and Hesco ™ bastions[59] emplaced as additional services arrived for the based troops. In one case, an engineer company commander expressed disgust with a battalion commander choosing to "Hesco" his own concrete buildings while denying the captain those supplies to support other units' survivability needs off base.[60] As recently as 2007, leaving some bases was actively discouraged due to "risk" and permission levels to exit friendly lines remained at surprisingly high levels.[61] This seems to directly contradict many theories in countering an insurgency[62], however, this has been the reality for much of the Iraq War and directly relates to perceptions of acceptable safety and risk.

A different case study involves the ground evacuation of roughly a squad of Marines who were seriously injured by a mortar barrage. A commander joined the small convoy bringing in the casualties for treatment in order to lend the protection of his personal security detail. The platoon commander of the injured Marines was aghast when the senior officer then dramatically reduced the convoy speed in the name of safety.[63] A separate incident also involved another battalion commander monitoring blue force tracker and demanding his units slow down, as he estimated that they were exceeding 20 mph, despite the movement being many hours long and through open desert.[64]

Other examples include mission timing and execution[65]. One leader expressed frustration at being held up from conducting a mission to repair road craters that had repeatedly been used for IEDs on a busy route. The Marine recommended strongly that the mission be conducted but suspected his leader of stalling the decision to prevent risk.[66] This type of decision-making behavior has been observed by others, particularly as units neared their rotation dates, with

commanders seemingly concerned with "getting to the finish line" (without or with few casualties) instead of fighting the enemy.[67] One Infantry Weapons Officer (Marine "Gunner") expressed some of his communities' frustrations with units that "..FOB up and hold tight" until they rotate out of Iraq.[68]

Employment of snipers in Iraq provides a more subtle example. One SNCO expressed frustration that the snipers had great utility and importance in the local COIN fight, but the decisions to employ them with security details decreased their ability to insert and operate clandestinely. Their traditional employment would have been in a sniper/spotter pair, but such risks that if the hide location is compromised there is significant danger to the snipers. To alleviate this the specialized assets were reinforced and the net result was reduced overall utility.[69]

The IED procedures in use in Iraq provide a more direct case to evaluate. Operations frequently grind to a halt whenever a real (or suspected) IED is encountered, as only Explosive Ordnance Disposal Marines are allowed to reduce them. EOD is perhaps the lowest density/ high demand asset in continuous use in Iraq, despite both combat engineers and infantry assault men having mission essential tasks that directly apply to reducing point minefields and "booby traps". One engineer officer exclaimed in frustration, "It used to take a complex obstacle belt, reinforced by fires and a tactical minefield to stop a MEF. Now it just takes a burlap sack on the side of the road." [70]

A final example involved a Military Transition Team leader who was unable to get nearby units to support his logistics' needs due to concerns over danger. The MiTT leader and his Iraqi unit was without electricity for weeks while a unit balked at sending a specialist out

from the nearby secure base. A technician eventually arrived, but was unable to finish his work due to strict guidance to return to the base before dark, presumably from a fear of some danger. This, despite his being able to stay under the protection of the MiTT team and the Iraqi unit.[71]

Recognition and Actions

" I personally feel that the present safety-freak environment discourages aggressiveness, vilifies risk-taking, destroys trust, and generally erodes the traits that have sustained the Marines as a fighting force for two and a half centuries."

USMC Captain on safety and risk[72]

The shift in perception over acceptable safety, risk, and casualties is ongoing. Many senior leaders are watching the perception creep while focused on one specific issue, e.g. a contemporary leader primarily focused on answering the need to improve vehicles to counter the IED threat or a MEF commander trying desperately to hold back non-combat fatalities in private motor vehicles. There would be a great benefit in a policy level discourse on the exact DOD level perception of acceptable safety, risk, and losses in the present and future fights. Aligning that perception correctly will result in relevant doctrinal updates, procuring the correct equipment sets, and enabling realistic operational plans that will sustain the public's support.

Failure to have such a dialogue is wasteful and creates multiple problems. One is a force that is equipped for a reality on the ground in Iraq, but whose tables of equipment stateside remain either largely unarmored or do not support amphibious requirements. Another is Marines who continue to train to mission-essential tasks that are no longer acceptable risks in reality and may need technological and/or organizational solutions to those mission requirements. Future concepts such as distributed operations carry great risk and, if that risk is not tenable in the political reality, should be reevaluated. The worst case is a Marine Corps which loses utility as

an instrument of national power because it subdues risk internally to the level that it no longer can be counted on to act decisively and win. Many leaders are unsure of what the answer is to acceptable risk and loss. However unpleasant the conversation is, it is needed.

The next step is recognition at the tactical level that leaders must be enabled to act. Senior commanders must realize that overemphasizing safety will have negative repercussions on the battlefield if steps are not taken to empower their subordinates. Senior leaders tend to view safety, force protection, operational effectiveness, and risk holistically, with each a part naturally factoring into the other. This message is often seriously distorted on its journey downward, with a large number of officers frustrated with the dilution of intense training, the loss of precious training time, and the diversion of effort into "CYA" safety paperwork and activities. [73] Senior commanders must aggressively search for means to communicate their intent and the relationship between good safety practices and effectiveness. Commanders must be aware that the sum effect of their policies, emphases, and supporting staff interactions with juniors may very well be conditioning a "risk aversion pathway" [74] . For example, a tactical safety specialist, overly aggressive executing his job and viewed as a "safety-nazi"[75] speaking for the boss, may be the tipping point for junior commanders who have received too many other negative inputs.

The most important communication in this regard from the commander is his clear expectation to his subordinate leaders in regard to acceptable risk and mission accomplishment. As in Grossman's model, each leader needs the absolution of authority if he is expected to make critical decisions that will jeopardize mens' lives. This is perhaps most effective as personal communication, occasionally reinforced, from the leader's direct superior. There is a great need for orders processes to be updated to include guidance on acceptable risk. Rather than the

bottom-up ORM process that lends itself to distortion, there is a genuine benefit in an order outlining a priority on the mission beyond task and purpose. The aviation community has processes in this regard that may serve as a model.

The absolution of authority must be supported on the back end of incidents as well. The timing and exact conduct of mishap investigations and similar activities should be reevaluated with this in mind. Every leader contends with guilt over his decisions. The Corps needs leaders who are enabled to take measured risks, to display the initiative, aggressiveness, focus on the mission and boldness that will win future conflicts. Commanders should ensure that well-intentioned and necessary processes, policies, or inquiries do not dull a leader's edge that has been so carefully established over his career.

Endnotes

[1] 974 through Jan 2008 vs 990 at Tarawa from records at www.icasualties.org and www.tarawaonthenet.org

[2] For detailed discussion of this see: Ralph Peters, *Wars of Blood and Faith: The Conflicts that will Shape the 21st Century* (Mechanicsburg: Stackpole Books, 2007) and Rupert Smith, *The Utility of Force*: *The Art of War in the Modern World* (New York: Vintage 2008)

[3] The Spanish-American War illustrates this point well. Although taking place only 110 years past, the casualties from disease far outnumbered those from the enemy, with ninety percent of the 3,000 deaths attributable to infectious disease. http://www.loc.gov/rr/hispanic/1898/intro.html (accessed 2 April 2008)

[4] LtGen Paul VanRiper USMC, (Ret) conversation with the author 10 Apr 2008. *LtGen VanRiper pointed out that one aspect of social change influences contemporary casualty aversion: The shrinking of the average American family. Where in previous wars the American family had three or four children and had likely experienced premature death (from disease, infant mortality, industrial accidents, etc) as a part of life, contemporary families have only one or two children and are unlikely to experience premature death. This is in strong contrast with the average family size in countries of possible conflict.*

[5] Appendix C

[6] Appendix D

[7] S.L.A. Marshall, *Men Against Fire: The Problem of Battle Command in Future War.* (New York: William Morrow and Co., 1966) 78. *"Fear of killing, rather than fear of being killed, was the most common cause of battle failure." And "This [societal rejection of aggression and killing]is his great handicap when he enters combat. It stays his finger even though he is hardly conscious that it is a constraint upon him".*

[8] David Grossman, *On Killing: the Psychological Cost of Learning to Kill in War and* Society (New York: Back bay Books, 1996) pp1-4, *"Why did these men fail to fire? As I examined this question from the standpoints of a historian, a psychologist, and a soldier, I began to realize that there was one major factor missing from the common understanding of killing in combat, a factor that answers this question and more. That factor is the simple and demonstrable fact that there is within most men an intense resistance to killing their fellow man. A resistance so strong that, in many circumstances, soldiers on the battlefield will die before they can overcome it."*

[9] Grossman, 177-185

[10] Theodore Nadelson, *Trained to Kill: Soldiers at War,* (Baltimore: Johns Hopkins University Press, 2005) Grossman has been repeatedly invited to lecture at USMC schools, including Infantry Officer's Course and Command and Staff College.

[11] Grossman, 90

[12] Grossman, 142 See also Appendix A

[13] Appendix C

[14] Grossman, 144-145

[15] Appendix C

[16] Grossman, 151-155

[17] Appendix C

[18] Grossman, 189

[19] http://www.whitehouse.gov/history/presidents/ug18.html (accessed 28 Apr 2008)

[20] Grossman, 90

[21] MCO 1754.6A Marine Corps Family Team Building, 30 Jan 2006

[22] GySgt James Starkey, USMC. Email interview with the author 16 Jan 2008.
[23] www.pollingreport.com Reference ABC News/ Washington Post Poll Question, "All in all, considering the costs to the United States versus the benefits to the United States, do you think the war with Iraq was worth fighting, or not?" In April 2003, 70% responded "Worth fighting" compared to 36% in Sept 2007.

[24] Appendix D
[25] Carl Ceulemans, "The Moral Equality of Combatants", *Parameters*Vol XXXVII No. 4 (Winter 07-08): 99-109. See also: LTC Peter Kilner, USA, "Morality in War" as reproduced in *USMC Command and Staff College Leadership Lesson 2501 Sylabus AY 2007-08*, also available http://www.soldier-ethicist.blogspot.com

[26] Appendix C
[27] Appendix C
[28] MCBO 5400.19E Motor Vehicle Traffic Supervision 21 Apr 2007
[29] MCO P5102.1B NAVY AND MARINE CORPS MISHAP AND SAFETY INVESTIGATION REPORTING AND RECORD KEEPING MANUAL ,7 Jan 2005
[30] Lt Col Julian Alford, Interview with author, 29 Jan 2008. The author also witnessed this requirement in 2006 and 2007.
[31] Naval Safety Center Website, Executive Summary page, http://safetycenter.navy.mil/execsummary/trends/images/Slide18.GIF (accessed 27 Mar 2008)
[32] David Grossman with Christensen, Loren. *On Combat: The Psychology and Physiology of Deadly Conflict in war and Peace* (PPCt Research Publications, 2004)
[33] CWO 5 Cannon Cargile, USMC, email interview with the author, 27 Jan 2008.
[34] Maj Matthew Reiley, USMC, Email interview with the author, 24 Jan 2008.
[35] Cargyle
[36] FMFM 1-0 *Leading Marines* (Washington: HQMC 1995)
[37] For detailed accounts of these battles see:Bing West with Smith, Ray, *The March Up: Taking Baghdad with the 1st Marine Division* (New York: Bantam Books, 2003)and Bing West, *No True Glory: A Frontline account of the Battle of Fallujah* (New York: Bantam Books, 2005) and Nathaniel Fick, *One Bullet Away: The Making of a Marine Officer* (Boston: Houghton Mifflin, 2005)
[38] ALMAR 030/07 Marine Corps Professional Reading Program, 05 May 2007. "I require all Marines to read and discuss the marquee title, LtGen Brute Krulak's "First to Fight: An Inside View of the U.S. Marine Corps." This book depicts an elite, economical force that relies on adaptability, innovation, and esprit to succeed. It describes our Corps, and I want every Marine to understand who we are and what we are about."
[39] Appendix C. Example from one interview: *"I saw the company commander that I relieved in Fallujah express much more concern regarding safety and force protection than he did toward mission accomplishment. His self-imposed restrictions included operating exclusively at night, total avoidance of certain areas, and even refusal of certain mission types, due to concerns over force protection.... I took the opposite approach, placing mission accomplishment first, and announced to my Marines that we were the $&%*%&%& Marine Corps and we could go wherever we wanted, whenever we wanted, and would always accomplish the mission despite enemy interference. I suffered no more casualties than the preceding company, but accomplished many more missions. ... I just think that we have conditioned ourselves to be afraid of risks."*

[40] MCDP 1 *Warfighting* (Washington: HQMC, 1997)
[41] Appendix C. *A cross-reference of the survey answers to the element of the MAGTF the individual served in suggests that attitudes toward risk are less tolerant the further the MOS is removed from direct ground combat tasks. The sample size is too small to offer this as conclusive, but merely suggests the possibility.*
[42] Lt Col Julian Alford, Interview with the author.
[43] Col Brian McCoy, USMC, *The Passion of Command: The Moral Imperative of Leadership.* (Quantico: Marine Corps Association, 2006). See also Maj Gen James Mattis' *Commanding General's Message to all hands,* March 2003.

[44] Alford
[45] Appendix C. One respondent answered, " I constantly heard the statement, 'are you trying to get someone killed?' and 'I've got to bring everyone back alive' from his commander.
[46] MCWP 5-1 *Marine Corps Planning Process* (Washington: HQMC, 2000)
[47] Capt Philip Glenn, USMC. Email interview with the author, 23 Jan 2008.
[48] Lt Col Carl E Mundy III, "Spare the Rod, Save the Nation" *New York Times*, Dec 30, 2003.
[49] Appendix C
[50] Kimberley Johnson, "Too Much Battle Rattle?" *Marine Corps Times,* Jan 28, 2008.
[51] Starkey
[52] Appendix C
[53] Captain Walter Carr, USMC. Email interview with the author Jan 2008.
[54] Appendix C
[55] Major Micheal Broyan, USMC. Email Interview with the author Jan 2008.
[56] Kris Osborn, "Corps ups MRAP Order, May Replace Humvees", *Marine Corps Times,* Feb 19, 2007.

[57] Cargile, Alford, and Glenn.
[58] Col William F. Mullen III, USMC. Email interview with the author, 25 Jan 2008. *"When I was the RCT Ops O there were a couple of units that were very reluctant tot part with the protection of their vehicles and when they got hammered they withdrew into a cocoon mentality."*
[59] These are collapsible mesh grids ranging from two to six feet square that are filled with earth and used much as sandbags would be to build bunkers, or more commonly in Iraq, to harden the exterior of tents or buildings.
[60] Broyan
[61] Maj Robert L. Corl, USMC. Interview with the author, 24 Jan 2008.
[62] Concurrent with the "Surge" and "Al Anbar Awakening" there has been a recent move to shift forces off of the bases and into Iraqi towns alongside the people wherever possible.
[63] Corl
[64] Glenn
[65] GySgt James Starkey, USMC. Email interview with the author 16 Jan 2008. *"I have seen it [accommodation of safety to the exclusion of mission accomplishment] affect the planning and execution to the point that the mission is not realistically achievable. Example would be a time sensitive target being missed while the raid force waited for darkness or being forced to abandon the hit because you encountered an IED enroute and had to wait for EOD to show instead of being allowed to reduce it with organic assets."*

[66] GySgt Michael R. Leisure, USMC. Email interview with the author 23 Jan 2008. *Intervening time was used for a unit safety stand down, during which time two additional IEDs were placed and employed from the subject craters.*

[67] CWO2 Andrew D. Chesney, USMC (Ret). Email interview with the author, 22 Jan 2008.

[68] Cargile

[69] Starkey.

[70] LtCol Bryon Fugate, USMC. Conversation with the author 17 Nov 2007. *Standard procedures have evolved over the conflict, but have typically involved some variation of halting the unit's movement, cordoning the area, and waiting for the nearest EOD team to respond, at which time the team will deploy a robot to evaluate the suspicious item and often blow it in place, using the robot to drop a charge. Meanwhile, Marines going through MOS training to become assaultmen or engineers (MOS 0351 and 1371) are still being trained to do Bangalore rushes or place charges by hand to reduce explosive obstacles, highlighting differences in existing concepts of employment and actual usage due to risk concerns.*

[71] Maj Thomas G. Zeigler, USMC. Email interview with the author, 9 Feb 2008.

[72] Carr

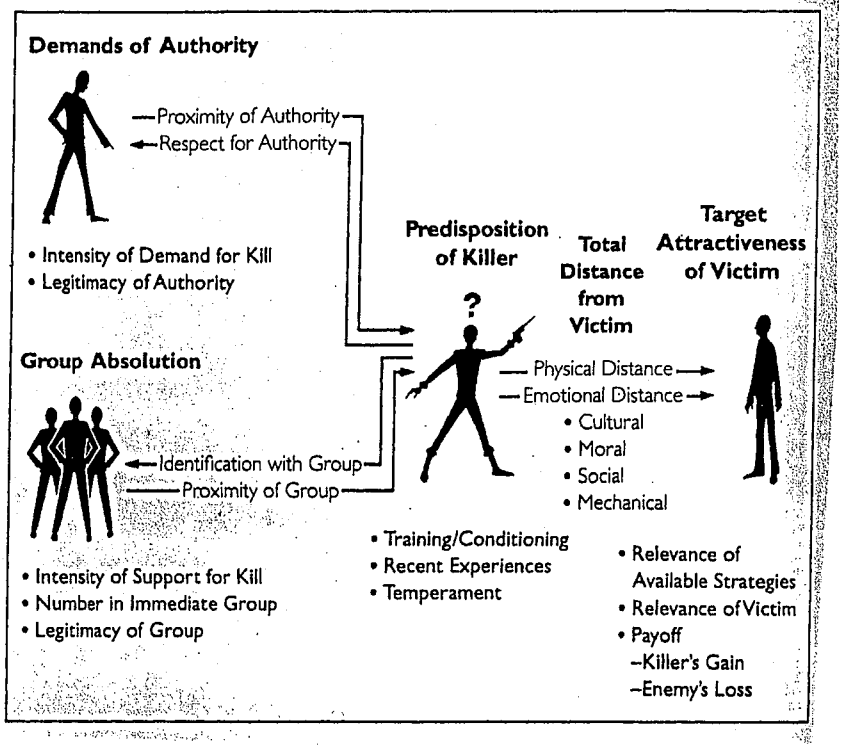
[73] Appendix C

[74] Grossman and Christensen. *On Combat: The Psychology and Physiology of Deadly Conflict in war and Peace* (PPCt Research Publications, 2004)

[75] Perjorative term commonly used by junior officers, NCOs and Marines to describe one who places the strict enforcement of safety rules over common sense accommodations to METT or the mission. Unit designated safety officers or government service (GS) tactical safety specialists often come in for a large share of criticism and scorn in the execution of their duties to enforce OSHA, DOD, and USMC safety standards on behalf of the unit commander.

Appendix A

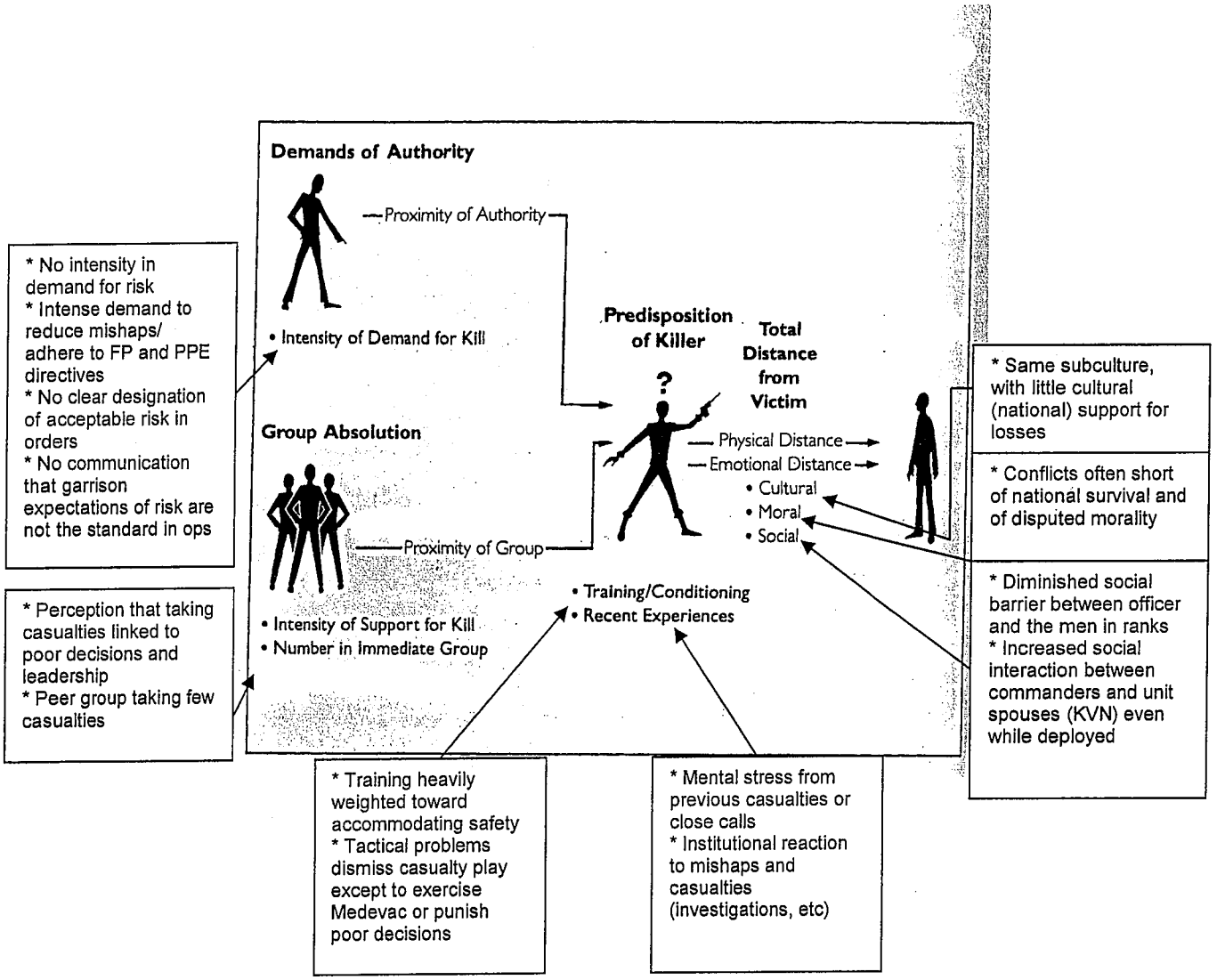
Grossman's Model



Reproduced from:
On Killing: The Psychological Cost of Learning to Kill in War and Society, 142.

Appendix B

Commander's model



Adapted by the author from:

On Killing: The Psychological Cost of Learning to Kill in War and Society, 142.

Appendix C

Interview Questions and Answer Matrix

Interview questions:

1. Did you feel that safety oriented training and education during PTP was allocated appropriately, took too much time, or not enough?

2. Do you feel that safety training and education and emphasis has increased annually over the last decade? Do you feel that it has had a desirable sum effect?

3. Have you seen junior Marines (soldiers, sailors) hesitate to do what was required of them in a critical situation due to a conditioned concern over violating safety procedures or being unsure if acting in an "unsafe" manner was appropriate or permissible?

4. Are you aware of any safety or force protection practices, requirements, or procedures that have hindered the individual Marine (soldier, sailor) from performing essential tasks required for the overall mission?

5. Are you aware of any instances where a commander or unit leader accommodated safety, force protection, or risk management concerns in such a way as to degrade the unit's ability to achieve the HHQ intent or mission?

6. As a leader, do you feel that you had the latitude to adjust Personal Protective Equipment worn (body armor or equivalent as well as other safety
gear) or safety practices employed IAW METT for given missions? If you had such latitude did you have the perception that downgrading PPE was discouraged by higher regardless of METT justification?

7. There is an anecdotal trend of commanders making public goals of "bringing every Marine" safely home from combat deployments. Have you ever seen this goal elevated above mission accomplishment for routine to mid intensity combat operations? Have you seen this attitude have an effect on what missions are accepted?

Response Demographics	
Total Respondents	**23**
OIF tours	30
OEF tours	5
Tours as Battalion Commander	7
Tours as Company Commander	13
Tours as Platoon Commander	3
Other (Staff, MiTT, CWO, SNCO, I&I)	12
Tours in HQ Element	3
Tours in GCE	21
Tours in MLE	11

Summary of interview responses

1. Did you feel that safety oriented training and education during PTP was allocated appropriately, took too much time, or not enough?

Over half of the respondents felt that too much time during predeployment training had been dedicated to safety topics. Many mentioned that the time allocated had been further misused, devoted to repetitive, questionable safety training that was low quality and of the "check-in-the box" variety for allegedly "CYA" motives. The responses illustrate a trend of more safety training with each successive iteration of OIF rotation.

2. Do you feel that safety training and education and emphasis has increased annually over the last decade? Do you feel that it has had a desirable sum effect?

Respondents unanimously agreed that there has been an annual increase in emphasis. Roughly 75% insist that the sum effect has been harmful. Reasons ranged from a degradation of mental toughness from watered down training to the diversion of precious training time and leadership energy into supporting this yearly increase.

3. Have you seen junior Marines (soldiers, sailors) hesitate to do what was required of them in a critical situation due to a conditioned concern over violating safety procedures or being unsure if acting in an "unsafe" manner was appropriate or permissible?

Largely the answer was no. There were several examples where Marines hesitated, most revolving around overly complex Escalation of Force (EOF) procedures or PPE interfering with a task and not being sure if they could remove it. Two respondents suggested that overemphasis on safety allowed below average Marines to hide behind alleged safety concerns to not do their jobs to the fullest. Numerous expressed concern for the recklessness of their Marines vice hesitation.

4. Are you aware of any safety or force protection practices, requirements, or procedures that have hindered the individual Marine (soldier, sailor) from performing essential tasks required for the overall mission?

Over sixty percent responded positively. 40% specifically cited various complaints with individual PPE degrading mobility or endurance.

5. Are you aware of any instances where a commander or unit leader accommodated safety, force protection, or risk management concerns in such a way as to degrade the unit's ability to achieve the HHQ intent or mission?

Over 70% of respondents had to differing degrees of severity. These ranged from "hunkering down"/"cocooning"/"FOB'ing Up" to commanders implementing mitigation that arguably degraded effectiveness all the way to commanders not accepting missions due to concerns over risk despite being in a supporting relationship to the supported unit requesting the mission.

6. As a leader, do you feel that you had the latitude to adjust Personal Protective Equipment worn (body armor or equivalent as well as other safety gear) or safety practices employed IAW METT for given missions? If you had such latitude did you have the perception that downgrading PPE was discouraged by higher regardless of METT justification?

Results were largely negative. The higher a commander was the more confident he was he could get a waiver. The more junior respondents were unaware waivers were possible and acted according to their own best judgment anyway with the belief that they would not necessarily be supported by their chain of command.

7. There is an anecdotal trend of commanders making public goals of "bringing every Marine" safely home from combat deployments. Have you ever seen this goal elevated above mission accomplishment for routine to mid intensity combat operations? Have you seen this attitude have an effect on what missions are accepted?

75% had either seen this attitude conveyed, heard such statements and saw them influence actions, or assumed unaggressive execution they witnessed was a result of such a mentality. One suggested the increased interaction between commanders and spouses/KVN indicates such statements because that is

what the spouses want or possibly expect to hear. Another respondent relayed the quote heard, "Nothing here is worth getting anyone killed over."

Appendix D

January 1, 2007

3,000 Deaths in Iraq, Countless Tears at Home

By LIZETTE ALVAREZ and ANDREW LEHREN

Correction Appended

Jordan W. Hess was the unlikeliest of soldiers.

He could bench-press 300 pounds and then go home and write poetry. He learned the art of glass blowing because it seemed interesting and built a computer with only a magazine as his guide. Most recently, he fell in love with a woman from Brazil and took up digital photography, letting both sweep his heart away.

Specialist Hess, the seventh of eight children, was never keen on premonitions, but on Christmas of 2005, as his tight-knit family gathered on a beach for the weekend, he told each sibling and parent privately that he did not expect to come home from Iraq.

On Nov. 11, Specialist Hess, 26, freshly arrived in Iraq, was conducting a mission as the driver of an Abrams tank when an improvised explosive device, or I.E.D., blew up with brain-rattling force. The blast was so potent it penetrated the 67-ton tank, flinging him against the top and critically injuring his spine. His three crewmates survived. For three weeks, he hung on at Brooke Army Medical Center in San Antonio, long enough to utter a few words to his loved ones and absorb their kindness.

On Dec. 4, Specialist Hess slipped onto the ever-expanding list of American military fatalities in Iraq, one that has increased by an average of more than three a day since Oct. 1, the highest three-month toll in two years. On Sunday, with the announcement of the death in Baghdad of Specialist Dustin R. Donica, 22, of Spring, Tex., the list reached the somber milestone of at least 3,000 deaths since the March 2003 invasion.

The landmark reflects how much more dangerous and muddled a soldier's job in Iraq has become in the face of a growing and increasingly sophisticated insurgency. Violence in the country is at an all-time high, according to a Pentagon report released last month. December was the third deadliest month for American troops since the start of the war, with insurgents claiming 111 soldiers' lives. October and November also witnessed a high number of casualties, 106 and 68 respectively, as American forces stepped up combat operations to try to stabilize Baghdad.

"It escalated while I was there," said Capt. Scott Stanford, a National Guard officer who was a commander of a headquarters company in Ramadi for a year, arriving in June 2005. "When we left this June, it was completely unhinged. There was a huge increase in the suicide car bombs we had. The I.E.D.'s were bigger and more complex."

Appendix D (cont.)

"And it was very tense before we left in terms of snipers," said Captain Stanford, a member of the Iraq and Afghanistan Veterans of America. "I don't know if there were more of them, or if they were getting better."

This spike in violence, which has been felt most profoundly by Iraqi civilians, who are dying by the thousands, has stoked feverish debate about the nation's presence in Iraq. Many Democrats in Congress are urging a phased withdrawal from the country, and the Bush administration is leaning toward deploying additional troops in 2007. If the conflict continues into March, the Iraq war will be the third longest in American history, ranked behind the Vietnam War and the American Revolution.

President Bush did not specifically acknowledge reaching the milestone of 3,000 American deaths, but a White House spokesman, Scott Stanzel, said the president "grieves for each one that is lost" and would ensure that their sacrifices were not made in vain. The campaign against terrorism, Mr. Stanzel said, will be a long struggle.

Specialist Hess had volunteered for his mission to spare another soldier the danger of going outside the wire that day. Like so many of his fallen comrades, he had become the victim of an inescapably dangerous roadside landscape.

"It was the type of injury you rarely recover from; in past wars you wouldn't have gotten out of theater," said his father, Bill Hess, a Boeing engineer and retired Air Force man. "So that was a blessing, that he could talk to us. He mouthed words and we were able to say we loved him. There is a lot to be said for that."

A Steady Toll of Deaths

In many ways, the third 1,000 men and women to die in Iraq faced the same unflinching challenge as the second 1,000 soldiers to die there — a dedicated and ruthless Iraqi insurgency that has exploited the power of roadside bombs to chilling effect. These bombs now cause about half of all American combat deaths and injuries in Iraq.

Over all, the casualty rate has remained relatively steady since 2005, dipping only slightly. It took 14 months for the death toll to jump to 2,000 soldiers from 1,000. It took about two weeks longer for it to rise to 3,000 from 2,000, during the period covering Oct. 25, 2005, to this week.

"It is hugely frustrating, tragic and disappointing that we can't reduce the fatality rate," said Michael O'Hanlon, a military analyst for the Brookings Institution.

The service members who died during this latest period fit an unchanging profile. They were mostly white men from rural areas, soldiers so young they still held fresh memories of high school football heroics and teenage escapades. Many men and women were in Iraq for the second or third time. Some were going on their fourth, fifth or sixth deployment.

But in other ways, the situation has changed in the past year. Improvised explosive devices — the kind that killed Specialist Hess — have grown deadlier, despite concerted Pentagon efforts and billions of dollars spent trying to counteract them. Insurgents are now more adept at concealing bombs, booby-trapping them and powering them to penetrate well-armored vehicles. They are also scattering more of them along countless roads using myriad triggers and hiding spots — under garbage and tires, behind guardrails, inside craters.

At the same time, Iraqi citizens have grown less inclined to tip off soldiers to the presence of these bombs. About 1,200 roadside bombs were detonated in August.

The toll of war has fallen most heavily this year on regular Army soldiers, at least 544 of whom died in this group of 1,000, compared with 405 in the last group. This increase was the result of fewer National Guard soldiers and reservists being deployed to Iraq in 2006.

Considering the intensity of the violence in Iraq this year, it is remarkable that the casualty rate did not climb higher, analysts and officers say. Long-awaited improvements in body and vehicle armor have helped protect soldiers, and advances in battlefield medicine have saved many lives. New procedures, like leaving wounds open to prevent infection, and relaying soldiers to hospitals faster than ever, have kept more service members alive. Troops now carry their own tourniquets.

During World War II, 30 percent of all wounded soldiers died of their injuries, a number that dipped to 24 percent during the Vietnam War and then to 9 percent for the Iraq conflict. Though this is a positive development, it also means that more soldiers are coming home with life-changing injuries, including amputations and brain trauma. More than 22,000 soldiers have been wounded in Iraq.

"There is no question that the number of dead should have been far higher," said Dr. William Winkenwerder, the assistant secretary of defense for health affairs, referring to the Iraqi conflict. "Some of these blast injuries are very powerful."

Bombs and bullets are not the only things that can kill soldiers; nearly 20 percent of those who die in Iraq do so outside of combat operations. Sometimes it is the hazard of driving too quickly on badly rutted roads to avoid danger. Humvees, weighted down with armor, can easily flip if maneuvered too quickly. Many of Iraq's roads are not built to hold heavy vehicles, and the ground can give way, tossing multi-ton machines into narrow canals where soldiers have drowned. Helicopters are sometimes strafed by sandstorms or crippled by mechanical malfunctions. Accidents make up two-thirds of the nonhostile deaths.

With so many soldiers carrying so many weapons, unintentional casualties occur, sometimes while handling firearms. Fire from one's own side is another inevitability of war, as is suicide. Since March 2003, 93 soldiers have died from self-inflicted wounds in Iraq.

In a way, these deaths, coming not at the hands of the enemy, but as a consequence of inferior roads and turbulent weather, can be even more difficult for parents to accept. Sometimes they wait months for official reports, since all noncombat deaths must be investigated.

"I don't think I ever thought something like this could happen," said Shelley Burnett, whose son, Lance Cpl. Jason K. Burnett, 20, died in May after his tank toppled into a canal. "We talked a lot about the I.E.D.'s and the dangers out there, but Jason kept saying, 'There is not a whole lot they can do to a tank.' "

Death at Roadside

Appendix D (cont.)

Over the last two years, the Pentagon has worked frantically to harden body armor and the armor on its Humvees and other vehicles. And the insurgents in Iraq have responded just as forcefully with deadly innovations in roadside bombs, and a fury of sniper bullets.

The most lethal development is the use of the "explosively formed penetrators," which pierce armor and stay intact when they explode. Roadside bombs are often detonated from a distance — with garage door openers, for example — or automatically, from pressure-sensitive devices, like a simple rubber air hose. Motion detectors and infrared devices are also used.

The vast majority of these bombs do not kill soldiers, or even injure them seriously. Four out of five I.E.D.'s that detonate do not cause casualties, an improvement over previous years, the Pentagon says. But those devices that do cause casualties are killing more soldiers. An analysis by The New York Times of military records found that in 2003, the devices accounted for 16 percent of troop fatalities. This year, they accounted for 43 percent. And an increasing number are killing more than one soldier.

"Unfortunately, when there is a fatal I.E.D. attack, there often are multiple wounded and casualties," said Christine DeVries, a spokeswoman for the Pentagon's Joint I.E.D. Defeat Organization. "The enemy has had some success in adapting to what we are doing."

Lance Cpl. Jon Eric Bowman, 21, affectionate and angel-faced, was typical of many of the soldiers and marines who found their calling in the military. He was raised in rural Dubach, La., far from the razzmatazz of New Orleans, and could not wait to join after the Sept. 11 attacks.

He was first sent to Iraq early in 2005. When he came home later that year, he had changed. Three days before he was set to redeploy this September, he sat with his wife in their truck and talked for six hours.

"He was crying, he was so scared," said his wife, Dawn Bowman, 26. "He was having dreams that he wasn't coming back."

In fact, Corporal Bowman had been having blackouts, migraines and a tic, new ailments from his time in Iraq, his wife said. The diagnosis was Tourette's syndrome, and he was then told by doctors in in Louisiana that fluid had built up in his brain.

He wound up back in Iraq, anyway. "They felt he was just trying to get out of Iraq," said Johnny Bowman, the corporal's father, of his son's superiors. "That there was really nothing wrong with him. That's what he told me on the phone."

Corporal Bowman did not push the issue, feeling guilty about abandoning his fellow marines. On Oct. 9, his Humvee ran across a roadside bomb, killing him instantly. He had been manning the machine gun.

"Jon Eric was not just my only son," his father said. "He was my best friend."

Appendix D (cont.)

Lance Cpl. Jeromy D. West, 20, a mortar man who loved to fish as much as he hated to study, was killed on Nov. 25 by a sniper bullet as he stood guard on a roof in Haditha. It was his second deployment.

In December, shortly after word of his death, his family honored his wishes and held a memorial for him on the football field at Hamilton High School, near San Diego, where he had been a star player. A thousand people showed up.

"Everybody liked him," his stepfather, Ron Klopf, said. "People would say, 'God, your son is polite.' And I would say, 'My kid?' I called him Eddie Haskell — so polite at everybody else's house."

Corporal West was goofy in the best way. Not long before he joined the Marines, he and his friend would compete to see who could get a bigger freeze headache from eating too much ice cream. They would writhe in pain. Then they would do it again. He was 17 when he decided to get serious and join the corps, something his parents tried to talk him out of.

" 'You can get killed doing this,' " Mr. Klopf remembers saying. "And he said, 'Should we send some other parent's kid out there?' And that's how he was."

For Corporal Burnett, death came not from bullets or bombs but from riding in a tank in a country crisscrossed with irrigation canals and crumbly roads. Just two years after graduating from high school in St. Cloud, Fla., where he spent his summers building houses for the poor and four-wheeling on back-country roads, Corporal Burnett's tank fell off a bridge and plunged into a canal, in which he drowned.

His mother cannot forget the day Jason and his younger brother tossed her back and forth in the yard to make her scream with laughter. "He was a fun-loving kid," Mrs. Burnett said. "If you heard laughter, you knew Jason was around."

Optimism was Specialist Robert F. Weber's indelible quality. A gunner from Cincinnati, he had warned his mother, Cathy, that the roads in Iraq were wretched. She worried a lot during his first deployment, particularly after he sent home a roll of film to develop. The first print she saw was of a missile hitting a barracks.

But he made it back to America and bought a blue Kia, the color of his eyes, before redeploying three weeks later. The Army had been a good fit. "He was proud of himself," she said of Bobby, her only child. "I was very proud. It was like he found his niche."

On his second deployment, though, the situation in Iraq had become grimmer. "Mom, things are getting worse over here, more dangerous," he said, from his base near Mosul the Saturday before he died. "The roads are bad. You don't run over anything even if it looks like a piece of paper."

But the lumbering armored Humvee he was on never hit a bomb on Sept. 30. It swerved somehow and flipped, killing him.

Mrs. Weber said she cannot imagine seeing the troops walk away from Iraq now, when democracy seems as unattainable as ever. "For what did all these guys get killed over there?" she asked, incredulously. "What for?"

Seven Days from Home

Back in America, countless families and friends have waited and worried and tried their best these past years to keep themselves busy until their husbands, sons, wives, daughters, fathers, mothers or buddies returned home safely. For 3,000 of them, the reunion never came.

In too many cases, the homecoming was tantalizingly near, a few more X's on the calendar and the vigil would be over. A number of soldiers were killed just days and weeks from the end of their deployment, a date close enough to allow those back home to lower their guard a trifle, making the deaths all the more devastating.

"It's almost like Christmas is here, and you wake up Christmas morning and there is no Christmas," said Col. Bill Rochelle, a retired National Guard commander of the 42nd Division support command.

Gunnery Sgt. John D. Fry, a 28-year-old marine from Lorena, Tex., was seven days from scooping up his wife, Malia, and his three kids into a group hug back in America. "My plans," Sergeant Fry told his commander, "are to go home and wrestle with my kids."

He and Mrs. Fry were only 15 when they went on their first date, to see "A League of Their Own," and then to eat ice cream at the mall. Mom and Dad drove them home. A year later, he plopped her on his lap and proposed. They kept their engagement a secret. Not long after, he was named salutatorian at Heritage Christian Academy. Another student bested him for the top title; it was the future Mrs. Fry, the valedictorian.

"We were soul mates," Mrs. Fry said. On Nov. 15, 1995, five days after he graduated from boot camp, they were married.

Mr. Fry, who liked a challenge, specialized in defusing explosive devices, a nerve-racking skill he brought with him to Iraq. "Babe," Mrs. Fry recalled his saying when he chose the specialty, "it's dangerous, but I want to do it. And I said, 'Let's go.' "

A team leader, Sergeant Fry, who shipped out to Iraq in September 2005, disarmed 73 bombs, including one of the biggest car bombs found in Falluja. Once he helped defuse a suicide vest that insurgents had belted to a mentally handicapped Iraqi teenage boy. The boy had been beaten and chained to a wall. Another time, he spotted a bomb from the roof of a house. A little boy popped into the yard, hovering dangerously close to it. Sergeant Fry won his confidence by playing peekaboo, then got him to move away.

He was in "very high spirits" in March, calling his wife to say that his duties were done, his paperwork filed and his anticipation impossible to stifle. "He had made it," she said. Then a mission came down, and commanders were preparing to send a team of mostly inexperienced

men to defuse bombs along a road in Al Anbar province. He volunteered for the job, instead. "That is how he led," Mrs. Fry said.

Sergeant Fry found three bombs that night and defused them. But the insurgents had hidden a fourth bomb under the third one, a booby-trap. It blew up and killed him. An Army team stayed with his body for six hours, fending off enemy fire in the dark until soldiers with mortuary affairs arrived to take his body away.

The war never scared him, Mrs. Fry said.

"It was hard, but he felt he was making a difference," she said. "He believed truly, that if he wasn't over there, they would be trying to harm us here."

Mark Mazzetti and Griff Palmer contributed reporting.

Correction: January 3, 2007

A front-page article on Monday about American military members who have died in the Iraq war misstated the number of crewmates who survived an explosion that killed a tank driver, Specialist Jordan W. Hess. There were three, not four.

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